

**U.S. Fish and Wildlife Service 2018-2023 Geospatial Services 5 Year Strategic Plan (GSSP)
Annual Action Plan for Fiscal Year 2018**

These Actions and Tasks will be reviewed and updated yearly.

Goal 1: Governance

Provide leadership and direction regarding the use of geospatial science to accomplish the Service mission. Identify and prioritize geospatial needs, align Service and Departmental strategies and activities, and provide policy and oversight to ensure progress in achieving geospatial services goals.

2018 Goal Group Team: Mitch Bergeson, Liz Cruz, and Ron Salz

Objective 1.1 Update the Service Geospatial Services Strategic Plan (GSSP) every 5 years.

Action Item 1.1.1 Strategic Plan completed by the GIS Steering Committee (SC) and signature process initiated.

Task 1.1.1.1 Finalize all Action Items (Oct 2017 - Goal Groups).

Action Item 1.1.2 Final plan signed by Directorate.

Task 1.1.2.1 Submit Strategic Plan into DTS. (March - Chris Lett)

Task 1.1.2.2 Post final Strategic Plan on Service Geospatial Website. (July - Chris Lett)

Objective 1.2 Implement the GSSP by reviewing and updating the Service Geospatial Services Strategic Plan S.M.A.R.T. actions items annually.

Action Item 1.2.1 Quarterly review of FY18 Action Items and Tasks

Task - 1.2.1.1 - Quarterly review of Action Items at beginning GIS SC meetings. (Dec, Mar, June, Sept - GIS SC)

Action Item 1.2.2 Review of objectives and development of FY19 Actions

Task 1.2.2.1 - Add at least a half day review of Action Items as an agenda item for the GIS Steering Committee Face to Face meeting. (Sept - GIS SC)

Task 1.2.2.2 - Review the FY 18 objectives and develop FY 19 actions at GIS Steering Committee Face to Face meeting in Louisiana (Nov - GIS SC).

Objective 1.3 Participate in and coordinate with Department of the Interior geospatial committees.

Action Item 1.3.1 National GIS Coordinator represent the FWS on the Department of the Interior Geospatial Advisory Committee (DOI GAC).

Task 1.3.1.1 - Report on DOI GAC activities on monthly GIS SC call. (Monthly - Chris Lett)

Task 1.3.1.2 - Poll the Steering Committee for any issues to take to the DOI GAC.
(Quarterly - Chris Lett)

Action Item 1.3.2 National GIS Coordinator and Steering Committee members represent or delegate representation to other DOI GAC working groups and teams.

Task 1.3.2.1 - Represent and report on Data Coordination Subcommittee (DCS) activities on monthly GIS SC call (Monthly - Ron Salz).

Task 1.3.2.2 - Survey the Steering Committee for issues to be brought to the DCS
(Quarterly - Ron Salz).

Task 1.3.2.3 - Represent and report on Geospatial Enterprise Licensing (Quarterly - Chris Lett).

Task 1.3.2.4 - Represent and report on Position, Navigation and Timing Subcommittee
(Quarterly - Kenny Elsner).

Task 1.3.2.5 - Represent and report on DOI AOL Portal Subcommittee (Quarterly - Kenny Elsner).

Objective 1.4 Coordinate and collaborate on geospatial science activities at a national level.

Action Item 1.4.1 Hold FWS National GIS Steering Committee Face to Face Meetings

Task 1.4.1.1 Organize the 2018 Face to Face meeting in New Orleans, Louisiana (Nov - Chris Lett, Mark Parr, Kenny Elsner)

Action Item 1.4.2 Coordinate attendance and involvement in geospatial user conferences

Task 1.4.2.1 Coordinate FWS involvement in the 2018 ESRI Fed UC (March - Chris Lett)

Task 1.4.2.2 Coordinate FWS involvement in the 2018 ESRI Developers Conference
(March - Chris Lett)

Task 1.4.2.3 Coordinate FWS involvement in the 2018 ESRI International User Conference
(July - Chris Lett)

Task 1.4.2.4 Develop the FWS/NPS Geospatial Workshop (February - GIS SC Education Task Group)

Task 1.4.2.5 Coordinate attendance to the FWS/NPS Geospatial Workshop (March - Chris Lett)

Goal 2: Business Processes

Ensure common, unified, geospatial processes are integrated into priority Service activities and support improved decision making.

2018 Goal Group Team: Pat Lineback, BJ Richardson, Gabriel DeAlessio, Karen Rank

Objective 2.1 Ensure improved geospatial processes are integrated with high priority Service activities. Identify and prioritize high priority FWS business activities with leadership and encourage geospatial analysis in the development and implementation of project plans.

Action Item 2.1.1 Identify and support high priority Service activities with GIS-supportive leaders.

Task 2.1.1.1: Develop written GIS guidance and best practices to improve Species Status Assessments (SSA) data deliverables and ensure that SSAs' are measurable and repeatable. (Lara Juliusson - September, 2018)

Task 2.1.1.2: Engage in and provide support to Landscape Conservation Design/Projects. (Mark Richardson - September, 2018)

Action Item 2.1.2 Identify, assess, and improve GIS capacity across FWS.

Task 2.1.2.1: Evaluate Region 8 process to understand and improve effectiveness and efficiency of Regional GIS and data support across programs. Assess and document potential to apply or adapt this process and/or results across other regions or nationally. (Pat Lineback - September, 2018)

Objective 2.2 Encourage Service's new Data Management Team and Regional Data Management Workgroups to develop data management strategies with adequate geospatial representation to improve and complement both data science and geospatial science.

Goal 3: Data Architecture

Provide Service staff, partners, and the public with the standardized geospatial information needed to carry out Service business processes, partner conservation needs, and/or make informed decisions.

2018 Goal Group Team: Todd Sutherland, Linda Moeder, Matt Heller, David Hines

Objective 3.1 Promote best practices in geospatial data resource management as identified in 378 DM 1 (DOI Data Resource Management Policy).

Action Item 3.1.1 Develop training session on using and storing information stored in the Enterprise Data Warehouse (EDW).

Task 3.1.1.1: Develop training sessions on EDW storage (live and recorded) and disseminated on the sharepoint site. (March 2018 - Chris Lett)

Action Item 3.1.2 Schedule and deliver at least 2 training sessions to data stewards and data professionals who manage Service enterprise geospatial datasets

Task 3.1.2.2: Develop training sessions (live and recorded) on data curation for data stewards and data professionals on use of EDW. (March, 2018 - Kenny Elsner)

Objective 3.2 Identify and make available all actively maintained, complete enterprise datasets with compliant FGDC metadata and comprehensive database documentation.

Action Item 3.2.1 Identify existing enterprise geospatial datasets.

Task 3.2.1.1: Agree upon the definition of the term enterprise geospatial datasets and post to the sharepoint site (Geospatial Services Information - general info and resource page and/or other relevant sharepoint pages). (August 2018 - Linda Moeder, Todd Sutherland, David Hines, Matt Heller)

Task 3.2.1.2: Consider and compile a list of enterprise geospatial datasets based on existing sources/data listing (e.g. known FWS authoritative datasets, FWS National Data Engagement listing, sharepoint website, recent FWS refuges, NWI, etc.) and post to the FWS sharepoint site. (September 2018 - Linda Moeder, Todd Sutherland, David Hines, Matt Heller)

Task 3.2.1.3: Ask FWS GIS Steering Committee to review the compiled list of enterprise geospatial datasets and add where they see gaps. (October 2018 - FWS GIS Steering Committee)

Action Item 3.2.2 Assess level of maturity for these geospatial datasets.

Task 3.2.2.1: Define level of maturity ranking classifications (August 2018 - Linda Moeder, Todd Sutherland, David Hines, Matt Heller)

Task 3.2.2.2: Assign level of maturity rating classification to enterprise geospatial datasets (previously compiled). (September 2018 - Linda Moeder, Todd Sutherland, David Hines, Matt Heller)

Action Item 3.2.3 Publish geospatial datasets to the appropriate repositories.

Task 3.2.3.1 Identify appropriate repositories (e.g. Servcat, data.gov, etc.) and based on available enterprise datasets listed, catalog existing repositories utilized by each dataset, and post to the FWS sharepoint site. (October 2018 - Moeder, Sutherland, Hines, Heller)

Task 3.2.3.2 If publishing required, contact identified enterprise geospatial datasets data managers. (December 2018 - Linda Moeder, Todd Sutherland, David Hines, Matt Heller)

Action Item 3.2.4 Assist data stewards of the geospatial datasets with development of data management plans.

Task 3.2.4.1: Provided a data management plan training session at the FWS/NPS Geospatial Workshop. (March 2018 - David Hines and Greg Galligan)

Goal 4: Application and Technology Architecture

Provide Service staff and partners with recommended standardized geospatial infrastructure, applications and web mapping solutions. Enable the technology to collect, maintain, use, and publish geospatial data in support of the Service mission and business requirements. Support enterprise efforts that enable the design and implementation of a standard, enterprise-wide technical architecture.

2018 Goal Group Team: Chris Lett, Mary Balogh, Jason Duke, Kenneth Elsner

Objective 4.1 Achieve efficiencies and cost savings by centralizing Service geospatial technology and applications where appropriate.

Action Item 4.1.1 Implement Enterprise Data Warehouse (EDW) components to comply with data center consolidation and other IT security compliance needs.

Task 4.1.1.1 Assist in development of strategies, plans, communications, and outreach for implementation of the components of the Enterprise Data Warehouse initiative. (FY18 - Geospatial Data Services Team (GDS))

Task 4.1.1.2 Geospatial Data Services (GDS) and Migratory Birds pilot will test, develop, and implement a process utilizing High Performance Computing Environment (HYPR) infrastructure to analyze aircraft, satellite, and UAS remote sensing data. (FY18 - GDS)

Task 4.1.1.3 - Enable, test and report on the use of Citrix for GIS by field offices to access EDW components by fostering training, software, and infrastructure and assisting with the Citrix environment designed for low to mid-level GIS use. (FY18 - GDS, GIS SC and volunteers)

Action Item 4.1.2 Support best practices and platforms for enterprise server integration to host geospatial data and raster data as part of EDW.

Tasks 4.1.2.1 - GDS will develop and optimize the ArcGIS Enterprise platform and databases for Service-wide use to increase efficiencies by clustering resources and by collaborating with Esri on the Esri Enterprise Assistance Program (EEAP). (FY18)

Tasks 4.1.2.2 - GDS will research, implement, and manage internet and intranet platforms for geospatial data hosting and map sharing including ArcGIS Online and FWS Internal Map Portal. (FY18)

Action Item 4.1.3 GDS and SC will research, implement, and maintain enterprise shared drive solutions to promote Service-wide collaboration through shared infrastructure as part of EDW.

Task 4.1.3.1 Branch of Geospatial and Data Service (GDS) will implement and maintain an enterprise shared drive solution (hardware and data structure) to promote Service-wide collaboration of GIS and remote sensing data through shared infrastructure to be usable by everyone. (FY18)

Task 4.1.3.1 GDS and the Steering Committee will research and develop best practices and proposals for housing large quantities of raster data. (FY18)

Objective 4.2 Manage and consolidate national geospatial software to reduce costs and duplication of effort.

Action Item 4.2.1 Implement and manage enterprise level software agreements, national servers, and software distribution processes.

Task 4.2.1.1 GDS will monitor software use and streamline national software acquisition to increase cost avoidance and lower administrative costs and research new acquisitions based on user needs to include in shared costs narratives. (June 2018 - GDS and IRTM)

Task 4.2.1.2 GDS and volunteers will maintain a software testing process and distribute enterprise software and installation guides through AppsToGo, SCCM, and the GIS sharepoint site. (FY18 - GDS and volunteers)

Task 4.2.1.3 GDS will continue to purchase, maintain, and distribute software licensing as part of the Esri and GIS Toolset suite of software and post full information and guides on https://fishnet.fws.doi.net/projects/gisnew/gisinfo/SitePages/Software_and_Applications.aspx. (FY18 - GDS)

Objective 4.3 Provide technical support to Service end users on software use, technology, and architecture.

Action Item 4.3.1 Maintain an information site with best practices and user guides to encourage information dissemination and awareness.

Task 4.3.1.1 - GDS and the SC will maintain Sharepoint, website, user access forms, how-tos, and videos to be updated on a regular basis and upgrade to the new version of Sharepoint <https://fishnet.fws.doi.net/projects/gisnew/gisinfo/default.aspx>. (FY18, GDS)

Action Item 4.3.2 Promote communication of remote sensing in the FWS through membership on national committees and groups dealing with remote sensing.

Task 4.3.2.1 Collaborate and coordinate on RS groups: 3D Elevation Working Group, National Digital Orthoimagery Program, Multi Resolution Land Characteristics Consortium , DOI Remote Sensing Working Group, DOI Unmanned Aircraft System Group, FWS Remote Sensing Task Group, and the FWS Unmanned Aircraft System Task Group. (FY18 - GDS)

Task 4.3.2.2 Remote Sensing Task Group (RSTG) will coordinate and create the FWS component of the Annual DOI Remote Sensing Report and Annual President's Aeronautics and Space Report and all other RS related datacalls. (June 2018)

Task 4.3.2.3 Improve distribution and access to remote sensing products for the Service using existing interagency and public sites. (FY18 - RSTG)

Task 4.3.2.4 RSTG will maintain a well-managed SharePoint Site for Remote Sensing resources and assist with the implementation of the remote sensing component of the shared drive

https://fishnet.fws.doi.net/projects/gisnew/gisinfo/SitePages/Remote_Sensing.aspx

(Dec 2018)

Objective 4.4 Foster compliance with Information Technology policies, directives and bulletins.

Action Item 4.4.1 Update geospatial related IT bulletins and GIS manual chapters to comply with IT policies related to geospatial applications and technology.

Task 4.4.1.1 GDS and SC will work on reviewing IT bulletins for geospatial related impacts. (FY18 - GDS)

Task 4.4.1.2 GDS and SC will work with IT on geospatial related IT policies and the GIS Manual Chapter. (FY18 - GDS)

Task 4.4.1.1 GDS and SC will work on updating the IT bulletins and current GIS manual chapter in FY17. (FY18 - GDS)

Task 4.4.1.2 GDS and SC will work with IT on geospatial related IT policies. (FY18 - GDS)

Action 4.4.2 Support network improvements for geospatial application and technology use by encouraging documentation of network issues and resolutions

Task 4.4.2.1 Educate end users to submit IT help tickets on network issues and possible provide a map and system for monitoring the station network connections (FY18 - GDS)

Objective 4.5 Coordinate GPS and mobile activities to enable technology, hardware, software and infrastructure to support the Service mission and business processes.

Action Item 4.5.1 Promote communication of mobile technologies and GPS in the FWS through membership on national committees and groups dealing with mobile technology.

Task 4.5.1.1 Attend meetings and contribute to national efforts on the DOI Geospatial Advisory Committee Position, Navigation, and Timing Group (FY18 - Kenny Elsner)

Action Item 4.5.2 The Mobile and GPS Task Group (MGPSTG) will maintain a well-managed SharePoint Site for mobile and GPS resources for Service personnel.

<https://fishnet.fws.doi.net/projects/gisnew/gisinfo/SitePages/GPS.aspx>

Task 4.5.2.1 Create and maintain a Mobile and GPS purchase and use decision support tool for field users with yearly updates and additions of hardware (FY18 - MGPSTG)

Task 4.5.2.1 Create and maintain a best practices GPS equipment list for field users with yearly updates and additions of hardware. (FY18 - MGPSTG)

Task 4.5.2.2 MGPSTG will support Mobile and GPS collection processes and application technology and will create and facilitate training (2018 Workshop & sharepoint MGPSTG, FY18)

Goal 5: Education, Promotion and Application

Promote the education and effective application of geospatial science across all programs and applicable conservation efforts within the Service.

2018 Goal Group Team: Cinthia Eichhorn, Mark Parr, Mark Richardson, David Hines, and Alex Miller

Objective 5.1 Build support for Geospatial science at all levels (management and staff) of the organization.

Action Item 5.1.1: Inform FWS management on the relevance of geospatial science and how it can be implemented to support the FWS mission.

Task 5.1.1.1: Invite the FWS GIS Liaison to the next Face to Face SC meeting scheduled in Louisiana. (July 2018 - Chris Lett)

Task 5.1.1.2: Review and identify sections of the USFWS Manual chapter on GIS (270 FW 8) that require revision. (FY18 - SC)

Task 5.1.1.3: Develop a briefing on the key revisions/updates of the Manual Chapter to be presented to the Directorate (FY18 - SC)

Action Item 5.1.2 : Identify communication/education venues to promote awareness and the benefits of geospatial science.

Task 5.1.2.1: Create a list/document of potential communication/education venues (programs, listserves, initiatives) to promote awareness, benefits and application of geospatial science. (FY18, Goal 5 Group)

Action Item 5.1.3: Inform FWS staff on the relevance of geospatial science.

Objective 5.2 Increase capabilities of Service workforce to effectively use and apply geospatial science.

Action Item 5.2.1: Training strategy for the FWS workforce to migrate to ArcGIS Pro.

Task 5.2.1.1: Develop a one page FWS ArcGIS Pro training announcement to be posted on the national GIS Listserve. (FY18, SC)

Task 5.2.1.2: Identify and solicit instructors for the 4 hour online course, transitioning to ArcGIS Pro (CSP7103) scheduled for September, December, March and June. (FY18 - SC)

Action Item 5.2.2: Solicit instructors for “Workshop to Go” training series.

Task 5.2.2.1: Develop an announcement and solicit instructors for “Workshop to Go” training series. (FY18 - SC)

Action Item 5.2.3: Post Geospatial Training Workshop evaluations.

Task 5.2.3.1: Review and evaluate the post Geospatial Training Workshop evaluations/survey. (FY18 - GSC)

Task 5.2.3.2: Nominate and establish the new members of the Geospatial Training Workshop planning committee for 2020. (Nov 2018 - GSC)

Action Item 5.2.4: FWS Competencies of Geospatial science.

Task 5.2.5.1: Develop a document of required competencies of general biologists to effectively utilize geospatial science. (FY18 - Goal Group 5)